Appl. No. : 10/683,727 Filed : October 10, 2003

LISTING OF THE CLAIMS

1. (Original) A process of growing a thin film of Al_2O_3 on a substrate by a sequential vapor deposition process comprising a plurality of cycles, each cycle comprising:

exposing the part to gaseous trimethyl aluminum (TMA);

stopping provision of the gaseous TMA;

removing gaseous TMA from the chamber;

exposing the part to atomic oxygen; and

removing atomic oxygen from the chamber,

wherein in each cycle more than one monolayer of Al₂O₃ is formed.

- 2. (Original) The process of claim 1, wherein in each cycle a layer of Al_2O_3 3 Å thick is formed.
- (Original) The process of Claim 1, wherein the oxygen radicals are generated remotely in a radical generator.
- (Original) The process of Claim 1, wherein the process is carried out at room temperature.
 - 5. 17. (Cancelled)
- 18. (Previously Presented) A process of growing a thin film of Al_2O_3 on a substrate by a sequential vapor deposition process comprising a plurality of cycles, each cycle comprising: exposing the part to gaseous trimethyl aluminum (TMA); stopping provision of the gaseous TMA;

removing gaseous TMA from the chamber; and

- exposing the part to atomic oxygen.
- (Previously Presented) The process of Claim 18, wherein the radicals are generated remotely in a radical generator.
- 20. (Previously Presented) The process of Claim 18, wherein the process is carried out at room temperature.